

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A method of compensating for process-induced CD variations in a pattern generator printing patterns on masks, said method comprising:

determining a two-dimensional critical dimension (CD) distribution associated with a pattern printed on a first mask,

generating a two-dimensional [[dose]] CD compensation file ~~to equalize variations in said two-dimensional CD distribution,~~

equalizing the two-dimensional CD distribution by modulating adjusting, in said mask pattern generator, the an exposing dose in response to accordance the two-dimensional CD compensation file ~~with said two-dimensional dose compensation file,~~ and

patterning a second mask using the modulated exposing doses~~said adjustment of the dose in said mask pattern generator.~~

2. (Previously Presented) The method of claim 1, wherein said determining includes predicting the two-dimensional CD distribution.

3. (Previously Presented) The method of claim 1, wherein said determining includes measuring the two-dimensional CD distribution.

4. (Currently Amended) The method of claim 1, wherein said two-dimensional CD compensation file includes pattern data.

5. (Currently Amended) The method of claim 1, wherein said two-dimensional CD compensation file includes dose compensation data.

6. (Currently Amended) The method of claim 1, wherein said two-dimensional CD compensation file is a correction map.

7. (Original) The method of claim 1, wherein said two-dimensional CD compensation file is a two-dimensional dose compensation profile.

8. -10. (Canceled).

11. (Currently Amended) A pattern generator apparatus for writing patterns on masks, said apparatus comprising:

means for determining a two-dimensional critical dimension (CD) distribution associated with a pattern printed on a first mask;

means for generating a two-dimensional [[dose]] CD compensation file ~~to equalize variations in said two-dimensional CD distribution;~~

means for equalizing the CD distribution by modulating ~~adjusting the~~ an exposing dose in accordance with response to said two-dimensional [[dose]] CD compensation file;

means for patterning a second mask using the modulated exposing doses~~said adjustment of the dose in said mask pattern generator.~~

12. – 13. (Canceled).

14. (New) A method of compensating for process-induced CD variations in a pattern generator printing patterns on masks, said method comprising:

determining a two-dimensional critical dimension (CD) distribution associated with a pattern printed on a first mask,

generating a two-dimensional CD compensation file to equalize variations in said two-dimensional CD distribution;

providing, in said mask pattern generator, at least one modulator for controlling a dose in response to desired CD compensations; and

patterning a second mask in said mask pattern generator using said at least one modulator to equalize said CD distributions in response to said two-dimensional CD compensation file.